Why is taxidermy still valuable?

By Katie Pavid Published by AMNH



One of the pheasants bound for the Hintze Hall displays

Bird curator **Hein Van Grouw** reveals how taxidermy is still bringing nature to life, centuries after the first animals were preserved.

On the first floor of the Museum's Hintze Hall, 38 pheasants rest in a spotless glass case.

They are part of the latest taxidermy display to be unveiled at the Museum - a modern twist on the traditional diorama. It will use dozens of seabirds and pheasants to showcase the great diversity of the planet's bird life.

Hein van Grouw, Senior Curator of Birds, was part of the expert team that oversaw the skinning and modelling of the birds.

https://www.nhm.ac.uk/our-science/departments-and-staff/staff-directory/hein-van%20grouw.html

He worked alongside freelance taxidermists Derek Frampton, Mike Gadd and Bas Perdijk.



38 pheasants will be part of a stunning new display

For Hein, taxidermy has been a career-long labour of love.

https://www.nhm.ac.uk/discover/bird-taxidermy.html

He says, 'For a lot of people it feels old-fashioned, but taxidermy is a vital tool that allows us to teach about the huge range of life on Earth. Good taxidermists can display animals in anatomically correct positions, so that they come to life before your eyes.

'We haven't found a better way do that yet, even with all the technology available to us. Having the real thing in front of you will always make more of an impact than a plastic model, digital reconstruction or photo.'

A diverse display

When assembling a display, the first thing to consider is the scientific concept behind it.

The humble pheasant was chosen by Museum curators because it is one of the world's best examples of sexual dimorphism - when males and females of the same species are different in color, shape and size.

The display of seabirds will include albatross, petrels, and shearwaters, highlighting how different species find food at sea.

Hein explains, 'The entire Museum is about showing people just how many different kinds of living organisms we share our planet with. Even within one family you get this amazing range of looks and behavior.'

Sexual dimorphism

Male pheasants aren't simply a shabby brown color. The birds that make their homes in English fields and woodlands are some of the most beautiful in the country.

Their plumage dazzles in deep red, mottled pink, rich chestnut, pale yellow and iridescent blue.



While mounted animals are common in galleries, skins are used in research

They even have ornamental wattles and long tails, while the females are smaller with far more subdued coloring.

The difference is caused by sexual selection. The females push the males to be become ever-more extravagant in color and plumage by preferring the most extreme to mate with.

The males must compete for the attention of the females. The more impressive their appearance, the easier it will be to find a mate.

The most colorful birds are therefore most likely to produce offspring, and the cycle continues.

Hein says, 'When you start looking, every species has a degree of dimorphism.

'The pheasant is a beautiful demonstration of how living things can vary wildly, even within a single family.'

How to skin a pheasant

All the Museum's birds have been preserved and mounted using similar techniques to those used 100 years ago.



Mounting a taxidermy bird is a delicate process

Hein explains, 'Museums use taxidermy to preserve an animal for future study. The techniques we use now are almost identical to those used in the past.

'There are more sophisticated chemicals available to us now, although with birds a good taxidermist won't need to use them.

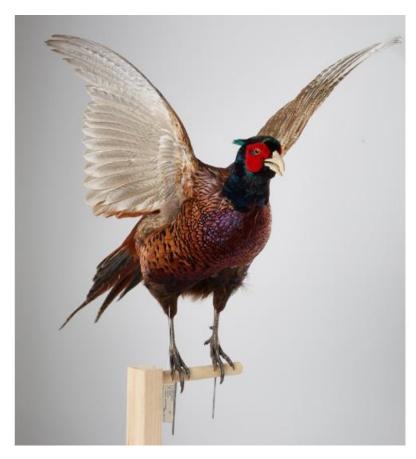
'When you have bird specimens, the first step is taking the skin off - it's like peeling an orange. It can be delicate because you want to preserve the feathers. It is not something that can be rushed.

'You clean the legs, wings and skull from the inside out, and ensure there is no fat or muscle tissue left.'

After washing the skin, taxidermists create a model body, using a combination of wire and solid materials.

The skin is then repositioned around the model body, the feet and wings are arranged, and glass eyes are inserted to complete the look.

Anatomical knowledge is required to create a lifelike bird - legs that are just a few centimeters out of place can make a specimen look awkward. Specialists often spend time in the field studying live birds before attempting to recreate one.



Some male pheasants have iridescent plumage

Art or science?

To master taxidermy, you'll need many years of practice and plenty of specialist knowledge. Capturing the living essence of an animal is a delicate job. Many of those who are proficient in the field consider themselves to be artists, although Hein disagrees.

He says, 'I don't think of it as an artistic achievement. It is a great skill, but for something to be artistic suggests that you are creating something original.

'Nature has done the designing for you, and you cannot get any better than that. A taxidermist isn't coming up with anything new.

'What counts is doing justice to nature's work. In this case, it is preserving the colours, feathers and natural beauty of the pheasants.'

How are bird skins used in research?

While taxidermy models grace the galleries of the Museum, scientists working behind the scenes prefer to use flat skins to advance their research.

Each skin is a biological snapshot, a moment in our planet's evolutionary history.

Hein says, 'Our collection of bird skins is used for all sorts of scientific study. For instance, many scientists are looking for changes to a species over time, and for that you need examples of birds from 200 years ago, 100 years ago, and now.

https://www.nhm.ac.uk/our-science/services/collections/zoology/birds/skins.html

'Our skins allow scientists to access that data and compare it to results we have got from modern DNA analysis. Those things together allow us to uncover evolutionary changes in birds.'

Using preserved pheasant skins, scientists can record data about the tail, wings, beak and feet. This provides clues to the birds' lives and habits.

Hein adds, 'Whole taxidermy mounts are used in our galleries, and skins are used for scientific research. Both have different functions, but both are equally important for advancing our knowledge about the living world around us.'

Visitors can see the display in the Museum's redeveloped Hintze Hall.

https://www.nhm.ac.uk/visit/galleries-and-museum-map/hintze-hall.html?_ga=2.252061962.2020736851.1499763699-295898977.1491485877